

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
106341155	04/14/97	ZHONG	028870056

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12M2/0203

EXAMINER
AZFURU, C

ART UNIT	PAPER NUMBER
1502	6

DATE MAILED: 02/03/98

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No. <b>08/834,155</b>	Applicant(s) <b>Zhong et al.</b>
Examiner <b>Carlos Azpuru</b>	Group Art Unit <b>1502</b>

- Responsive to communication(s) filed on \_\_\_\_\_.
- This action is **FINAL**.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

### Disposition of Claims

- Claim(s) 1-37 is/are pending in the application.
- Of the above, claim(s) 14-18, 23-26, and 32 is/are withdrawn from consideration.
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 1-13, 19-22, 27-31, and 33-37 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claims \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All  Some\*  None of the CERTIFIED copies of the priority documents have been
- received.
- received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

Receipt is acknowledged of the election filed 12/1/97.

### *Election/Restriction*

1. Applicant's election of Group I in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 14-18, 23-26, and 32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made **without** traverse in Paper No. 5.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-13, 19-22, 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hench et al. ('092).

Hench et al disclose a method of making a bioactive glass which comprises preparing a gel, aging said gel, and drying the to produce a porous composition (see col. 4, lines 53-64).

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Water is part of the reaction mixture, as can be seen in the paragraph bridging cols. 4-5. The methods differ only in the disclosure of drying near equilibrium.

However, Hench et al. clearly note that pore size, surface area and volume may all be varied by varying the final steps in the process. As such, the instant modification is viewed as a manipulation within the skill of the ordinary practitioner. There are no unusual and/or unexpected results which would rebut *prima facie* obviousness. As such, it is deemed that the instant process would have been within the skill of the ordinary practitioner given the disclosure by Hench et al to vary the process parameters as a means of obtaining various pore sizes, surface areas, and volumes. The instant method would have been obvious given the disclosure by Hench et al.

Hench et al. ('382) and Nogues et al. ('674 and '980) are cited for their disclosures of process including gelling, aging and drying.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Azpuru whose telephone number is (703) 703-0237. The examiner can normally be reached on Tuesday-Friday from 6:30 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone numbers for this Group are (703) 305-3592 and 305-4556. Unofficial faxes (such as proposed amendments to be used for an interview) may be sent to

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(703) 308-7924. Unofficial faxes are intended for papers which will not become part of the official file, and it is requested the Examiner should be contacted in order to ensure prompt attention.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**thurman.page@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

  
CARLOS AZPURU  
PRIMARY EXAMINER  
GROUP 1500